

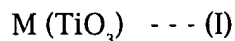
AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appl. No. 09/579,708

AG liquid phase. Although the reaction conditions are not particularly limited, in general, it is preferable to carry out the reaction in an alkaline solution by employing an alkaline liquid phase. It is preferable that the pH of the solution be about 13.0 or more, and more preferably 14.0 or more. When the pH is set to 14.0 or more, the particle size of the titanium-containing composite oxide particles dispersed in the sol can be decreased.

IN THE CLAIMS:

Please enter the following amended claims:

50631
A7 1. (amended) A perovskite titanium-containing composite oxide particle having a composition represented by general formula (I), wherein the specific surface area is about 10 to about 200 m²/g, the specific surface area diameter D₁ of primary particles defined by formula (II) is about 10 to about 100 nm, and a D₂/D₁ ratio of the average particle size D₂ of secondary particles to D₁ is about 1 to about 10:



wherein M is at least one of Ca, Sr, Ba, Pb, or Mg,

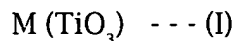
$$D_1 = 6 / \rho S \text{ --- (II)}$$

wherein ρ is the density of the particles, and S is the specific surface area of the particles.

A8 4. (amended) A process for producing sol in which a perovskite titanium-containing composite oxide particle represented by general formula (I) is dispersed, comprising the step of allowing a titanium oxide sol prepared by subjecting a titanium salt to hydrolysis in an acid solution to react with a metal salt comprising at least one

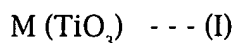
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of Ca, Sr, Ba, Pb, or Mg in a liquid phase:



wherein M is at least one of Ca, Sr, Ba, Pb, or Mg.

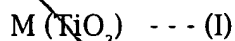
6. (amended) A perovskite titanium-containing composite oxide particle obtained by removing a dispersion medium from a sol in which a perovskite titanium-containing composite oxide particle represented by general formula (I) is dispersed, wherein said sol is obtained by a process comprising the step of allowing a titanium oxide particle comprising brookite crystalline form to react with a metal salt comprising at least one of Ca, Sr, Ba, Pb, or Mg in a liquid phase:



wherein M is at least one of Ca, Sr, Ba, Pb, or Mg.

Please add the following new claims:

17. (new) A perovskite titanium-containing composite oxide particle obtained by removing a dispersion medium from a sol obtained by a process in which a perovskite titanium-containing composite oxide particle represented by general formula (I) is dispersed, wherein said sol is obtained by a process comprising the step of allowing a titanium oxide sol prepared by subjecting a titanium salt to hydrolysis in an acid solution to react with a metal salt comprising at least one of Ca, Sr, Ba, Pb, or Mg in a liquid phase:



wherein M is at least one of Ca, Sr, Ba, Pb, or Mg.

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Sub B3
18. (new) The perovskite titanium-containing composite oxide particle as claimed in claim 6, wherein the specific surface area is about 10 to about 200 m²/g, the specific surface area diameter D_1 of primary particles defined by formula (II) is about 10 to about 100 nm, and a D_2/D_1 ratio of the average particle size D_2 of secondary particles to D_1 is about 1 to about 10:

$$D_1 = 6 / \rho S \text{ --- (II)}$$

a10
wherein ρ is the density of the particles, and S is the specific surface area of the particles.

19. (new) The perovskite titanium-containing composite oxide particle as claimed in claim 17, wherein the specific surface area is about 10 to about 200 m²/g, the specific surface area diameter D_1 of primary particles defined by formula (II) is about 10 to about 100 nm, and a D_2/D_1 ratio of the average particle size D_2 of secondary particles to D_1 is about 1 to about 10:

$$D_1 = 6 / \rho S \text{ --- (II)}$$

wherein ρ is the density of the particles, and S is the specific surface area of the particles.

IN THE ABSTRACT:

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

a11
A perovskite titanium-containing composite oxide particle having a composition represented by general formula (I), where the specific surface area is about 10 to about 200 m²/g, the specific surface area diameter D_1 of primary particles defined by formula

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(II) is about 10 to about 100 nm, and a D_2/D_1 ratio of the average particle size D_2 of secondary particles to D_1 is about 1 to about 10:

$$M(\text{TiO}_3) \text{ --- (I)}$$

wherein M is at least one of Ca, Sr, Ba, Pb, or Mg,

$$D_1 = 6 / \rho S \text{ --- (II)}$$

wherein ρ is the density of the particles, and S is the specific surface area of the particles is disclosed. The present invention has a small particle size and excellent dispersion properties, so that the particle is suitable for application to functional materials.
